series of silvery spots along the lateral line; a black spot in the axil.

Two specimens from Port Natal. Length $11\frac{1}{4}$ inches.

Sphyræna Güntheri.

D. $5\frac{1}{9}$. A. $\frac{1}{9}$. L. lat. 130. L. transv. 22.

The height of the body is one ninth of the total length; the length of the head is contained three times and two thirds in the total; the diameter of the eye is rather more than one seventh of the length of the head. The opercle has a single point; the opercles are scaly, and the præoperculum is rounded. The lower jaw with a short fleshy appendage anteriorly. The pectorals are contained nearly ten times in the total length; they are one third longer than the ventrals; the spine of the latter is nearly as long as the rays. The origin of the dorsal is on a level with the extremity of the pectorals, but somewhat behind the root of the ventrals, considerably in front of the middle of the length of the body. The interspace between the dorsals is equal to one seventh of the total length. The maxillary reaches to the anterior margin of the eye.

One specimen from Colon, Atlantic. Length 16 inches.

XXXVI.—*List and Revision of the Species of* Anolidæ *in the British-Museum Collection, with Descriptions of new Species.*

By A. W. E. O'Shaughnessy, Assistant in the Natural-History Department.

Since the date of the publication of Dr. Gray's 'Catalogue of Lizards in the British Museum' large additions have been made to the collection of specimens of the group *Anolis*. Many of these additional specimens were examined by Mr. Cope some years since, and furnished him with the types of new species, which he described in the 'Proceedings' of the Academy of Natural Sciences of Philadelphia. The following list is the result of a recent study of the entire series, and gives the names of all the species which appear to me to be represented in it.

Chamæleolis, Coct.

Chamæleolis fernandina, Coct., Sagra's Cuba, p. 145, t. xii.

Anolis chamæleonides, Dum. & Bibr. Erp. Gén. iv. p. 168.

Chamæleolis porcus, Gundlach, Rep. fis.-nat. Cuba, ii. p. 109; Cope, Proc. Acad. Philad. 1864, p. 168.

Xiphosurus, Fitz., Gray.

Xiphosurus Ricordii, Dum. & Bibr. *l. c.* p. 167; Gray, Ann. Nat. Hist. 1840, v. p. 111.

Eupristis baleatus, Cope, *l. c.* p. 168.

Two adult specimens, one being the type of Cope's *Eupristis baleatus*, which proves to be the same species. Both from San Domingo.

X. cristatellus, Dum. & Bibr. *l. c.* p. 143; Dum. Cat. Rept. 1851, p. 58; Reinh. & Lütk. Vid. Medd. 1862, p. 249.

There are now numerous specimens of this species in the collection.

X. homolechis, Cope, Proc. Acad. Philad. 1864, p. 169.

The type specimen is the single example referred by Dr. Gray to the preceding species. It is distinguished by a quite different scutellation of the upper surface of the head and muzzle—viz. smaller, irregular, and keeled, instead of the symmetrical flat plates. West Indies.

X. ferreus, Cope, Proc. Acad. Philad. 1864, p. 168.

The type, a large specimen, from Guadeloupe.

Dactyloa, Wagl.

Dactyloa equestris, Merr. Tent. p. 45; Dum. & Bibr. *l. c.* p. 157; Gray, *l. c.* p. 111.

Anolis rhodolæmus, Bell, Zool. Journ. iii. p. 235, t. xx.; Sloane, Jamaica, ii. p. 273, fig. 2.

The second specimen referred in Dr. Gray's Catalogue to this species is a *Urostrophus Vautieri*.

D. Edwardsii, Merr. *l. c.* p. 45; Dum. & Bibr. *l. c.* p. 161; Dum. Cat. Rept. p. 59.

Rhinosaurus, Gray.

Rhinosaurus gracilis, Neuwied, Bras. tab. fig. 2, Voy. ii. p. 131; Wagl. Syst. p. 148 (*Dactyloa gracilis*).

Anolis nasicus, Dum. & Bibr. *l. c.* p. 115; Dum. Cat. Rept. p. 57.

Anolis.

A. *With smooth ventral scales.*

Anolis bimaculatus, Sparrm. N. Act. Stock. v. p. 169, t. iv. fig. 1; Merr. *l. c.* p. 45.

Anolis Leachii, Dum. & Bibr. *l. c.* p. 153; Dum. Cat. Rept. p. 58, Gray, Cat. p. 200.
A. maculatus, Gray, Ann. Nat. Hist. 1840, v. p. 112.
A. reticulatus, Gray, Ann. Nat. Hist. 1840, v. p. 114; Cat. p. 204.
A. alliaceus, Cope, *l. c.* p. 175.

The types of the two latter are in the British Museum, and prove to be identical with the present species.

A. punctatus, Daud. Rept. iv. p. 84, t. lxvi. fig. 2; Dum. & Bibr. *l. c.* p. 112; Dum. Cat. p. 57.

A. viridis, Neuwied, Bras. fig. 1; Voy. ii. p. 132.
A. violaceus, Spix, Lac. Bras. p. 15, t. xvii. fig. 2.

The collection now possesses one adult specimen from Rio Janeiro.

A. Cepedii, Merr. *l. c.* p. 44; Gray, Cat. p. 201.

A. alligator, Dum. & Bibr. *l. c.* p. 134; Bocourt, Miss. Sc. Mex. iii. p. 59, note; Cope, Proc. Am. Phil. Soc. 1869, p. 162.
A. trinitatis, Reinh. & Lütk. Vid. Medd. 1862, p. 269.
A. Goudotii, Dum. & Bibr. *l. c.* p. 108 (type Mus. Par.).
A. æneus, Gray, Cat. p. 205.

The specimen described by Dr. Gray as *A. æneus*, presented by Th. Bell, Esq., is in my opinion a young specimen of *A. alligator*, Dum. & Bibr.

A. lucius, Dum. & Bibr. *l. c.* p. 105; Coct., Sagra's Cuba, p. 136, t. xii.

A. argenteolus, Cope, Proc. Acad. Philad. 1861, p. 213.

Previously to the specimens named *A. argenteolus* by Mr. Cope, this species was not represented in our collection; but after comparison with Cocteau's description, I cannot avoid referring them to *A. lucius*.

A. chlorocyanus, Dum. & Bibr. *l. c.* p. 117; Reinh. & Lütk. Vid. Medd. 1862, p. 266.

A. (*Ctenocercus*) *cœlestinus*, Cope, Proc. Acad. Philad. 1862, p. 177.

Specimens from San Domingo, named *A. cœlestinus* by Mr. Cope.

A. fusco-auratus, D'Orb. Voy. Amér., Rept. t. iii. fig. 2; Dum.& Bibr. *l. c.* p. 110; Dum. Cat. Rept. p. 56; Bocourt, Ann. Mus. vi. 1869, Bullet. p. 15, Miss. Sc. Mex. iii. pl. xiv. fig. 16.

A. viridiæneus, Peters, Monatsb. Berl. 1863, p. 147.

Hitherto unrepresented in the collection. Specimens from Para and Guayaquil.

A. Grahami, Gray, Ann. Nat. Hist. 1840, v. p. 113; Cat. Liz. pp. 203 & 274; Cope, *l. c.* 1861, p. 210, Proc. Am. Phil. Soc. 1869, p. 164.

A. punctatissimus, Hallowell, Proc. Acad. Philad. 1856, p. 225.
A. heterolepis, Hallowell, *l. c.* p. 230.
A. iodurus and *A. opalinus*, Gosse, Ann. & Mag. Nat. Hist. 1850, vi. p. 344.

It is important to establish the fact that Mr. Gosse's two species are the older *A. Grahami*, of which there would never have been any uncertainty had not Dr. Gray stated that the specimens on which he founded the species were from Dr. Gardner's Brazilian collection. The real entry in the register shows that he obtained them from a dealer named Gardiner without indication of a locality; and there can be no doubt that they came from Jamaica, this species being one of the commonest in the island.

A. acutus, Hallowell, Proc. Acad. Philad. 1856, p. 228; Reinh. & Lütk. *l. c.* 1862, p. 252; Cope, *l. c.* 1861, p. 209.

A. Newtoni, Günth. Ann. & Mag. Nat. Hist. 1859, iv. p. 212, pl. iv.
? *Lacerta principalis*, West, Beytr. z. Besch. v. S. Cruz.

Numerous specimens from Santa Cruz and Dominica.

A. gingivinus, Cope, Proc. Acad. Philad. 1864, p. 170, and 1871, p. 220.

The types (male and female) from Anguilla Island.

A. distichus, Cope, Proc. Acad. Philad. 1861, p. 208; Proc. Am. Phil. Soc. 1869, p. 164.

? *A. carbonarius*, Daudin.
A. dominicensis, Reinh. & Lütk. *l. c.* p. 261.

Specimens from the Copenhagen Museum and specimens named by Mr. Cope enable me to confirm his statement of the identity of the species.

A. stratulus, Cope, Proc. Acad. Philad. 1861, p. 209; Reinh. & Lütk. Vid. Medd. 1862, p. 255.

Numerous specimens from St. Thomas's Island.

A. cybotes, Cope, Proc. Acad. Philad. 1862, p. 177; Proc. Am. Phil. Soc. 1869, p. 164.

A. Rüsei, Reinh. & Lütk. *l. c.* p. 264.

Specimens (male and female) from San Domingo.

A. gibbiceps, Cope, Proc. Acad. Philad. 1864, p. 174.

The type (female) from Caracas.

A. citrinellus, Cope, Proc. Acad. Philad. 1864, p. 170.

The type from San Domingo.

A. damulus, Cope, Proc. Acad. Philad, 1864, p. 169.

The type presented by Dr. Günther.

A. insignis, Cope, *l. c.* 1871, p. 213.

A fine specimen, brought from Costa Rica by Mr. Salvin, agrees with Mr. Cope's recent description of this well-marked species.

A. Bouvieri, Bocourt, Miss. Sc. Mex. iii. p. 58, pl. xiv. fig. 8.

Three specimens from Pebas and Guayaquil. The tail, perfect, is compressed and has the upper edge serrated, as described by M. Bocourt.

A. transversalis, Dum. Cat. Rept. p. 57; Arch. du Mus. viii. p. 515, pl. xix. fig. 3; Guichen. in Casteln. Amér. du S., Rept. p. 17.

A. impetigosus, Cope, Proc. Acad. Philad. 1864, p. 174.

Mr. Cope's type, of which the habitat is unknown, being in the collection, I am able to refer it to the above species, described by Duméril.

A. heterodermus, Dum. *l. c.* p. 59, and *l. c.* p. 516, pl. xix. fig. 4.

Adult and half-grown specimens from Bogota enable me to add this other remarkable species, described by Duméril, to the list.

B. *Ventral scales keeled.*

A. (*Dactyloa*) *biporcatus*, Wiegm. Herp. Mex. p. 47; Bocourt, Miss. Sc. Mex. p. 98, pl. xv. fig. 8.

A. (*Draconura*) *vittigerus*, Cope, Proc. Acad. Philad. 1862, p. 179.

A single specimen from Rio Polochic, Guatemala, presented

by the Paris Museum, and numerous others named *A. vittigerus* by Mr. Cope. This species was referred by Dr. Gray to *A. principalis*.

A. Fraseri, Günth. P. Z. S. 1859, p. 407.

A. bitectus, Cope, *l. c.* 1864, p. 171.

A fine series, with some large specimens recently added. Some of the specimens have been named *A. pentaprion* and *A. vittigerus* by Mr. Cope; and the two types of his *A. bitectus* are also found to be the present species.

A. Petersii, Bocourt, Miss. Sc. Mex. iii. p. 79, pl. xiii. fig. 2, & pl. xv. figs. 11, 11*a*.

Two fine specimens and a young one in the collection are to be referred to this species. They are from Mexico.

A. Sagræi, Cocteau, Sagra's Cuba, Rept. p. 131, t. x.; Dum. & Bibr. *l. c.* p. 150; Dum. Cat. Rept. p. 58; Cope, *l. c.* 1862, p. 178, note; Bocourt, *l. c.* p. 81, pl. xv. fig. 14.

A. ordinatus, Cope, *l. c.* 1864, p. 175.

A large series, including the types of Mr. Cope's species, and those hitherto placed by Dr. Gray under *A. nebulosus*, Wiegm., with which he confounded this species.

A. maculatus, Gray, Ann. Nat. Hist. 1840, v. p. 113; Cat. Liz. p. 203; Reinh. & Lütk. *l. c.* p. 268.

A. lineatopus, Gray, Ann. Nat. Hist. 1840, v. p. 113; Cat. Liz. p. 203.

This species has a great resemblance to the last, but the ventral scales are considerably larger. Numerous specimens are now in the collection from Jamaica; the type of *A. lineatopus* is the same species.

A. pulchellus, Dum. & Bibr. *l. c.* p. 97; Dum. Cat. p. 56; Reinh. & Lütk. *l. c.* p. 257.

Now well represented, from St. Thomas's Island.

A. Richardi, Dum. & Bibr. *l. c.* p. 141; Gray, Ann. Nat. Hist 1840, v. p. 113; Cat. B. M. p. 202.

A. occipitalis, Gray, *l. c.* p. 112; Cat. Brit. Mus. p. 201.
A. stenodactylus, Gray, *l. c.* p. 114; Cat. Brit. Mus. p. 204.

All the specimens referred to or described by Dr. Gray under the above three heads belong to this species.

A. principalis, L.

A. carolinensis, Dum. & Bibr. *l. c.* p. 121.
A. porcatus, Gray, Ann. Nat. Hist. 1840, v. p. 112; Cat. Brit. Mus. p. 202.

The specimens described under the latter name are individuals of this species, with which the collection is now well supplied. It is not the *Dactyloa biporcata* of Wiegmann (as stated by Dr. Gray).

A. nebulosus, Wiegm.; Bocourt, Miss. Sc. Mex. p. 68, pl. xv. fig. 3.

One specimen recently acquired from Cuernavaca, those referred to this species by Dr. Gray being *A. Sagræi*, Coct.

A. Sallæi, Günth. P. Z. S. 1859, p. 405; Bocourt, *l. c.* p. 90, pl. xiii. fig. 3, pl. xvi. fig. 21.

A. cyanopleurus, Cope, *l. c.* 1861, p. 211.

A. spectrum, Peters, Berl. MB. 1863, p. 136.

Specimens from San Domingo and from Cuba.

A. semilineatus, Cope, *l. c.* 1864, p. 171.

The type from San Domingo.

A. ophiolepis, Cope, *l. c.* 1861, p. 211.

One specimen from Cuba, presented by Dr. Peters.

A. Copei, Bocourt, Miss. Sc. Mex. p. 77, pl. xv. figs. 10, 10*a*.

A fine specimen has been recently procured of Mr. Salvin from Costa Rica.

A. nebuloides, Bocourt, *l. c.* p. 74, pl. xiii. fig. 10.

Two specimens from Huamuchla, from Mr. Boucard.

A. crassulus, Cope, *l. c.* 1864, p. 173.

The types and other specimens. Central America.

A. nannodes, Cope, *l. c.* p. 173; Bocourt, *l. c.* p. 71, pl. xv. fig. 5.

The types and one other example, from Coban.

A. ustus, Cope, *l. c.* p. 172.

The types from Belize.

A. cymbops, Cope, *l. c.* p. 173.

The type from Vera Cruz.

Placopsis, Gosse.

Placopsis Valenciennii, Dum. & Bibr. *l. c.* p. 131.

P. ocellata, Gosse, Ann. & Mag. Nat. Hist. 1850, ii. p. 346.
A. leucocephalus, Hallow. Proc. Acad. Philad. 1856, p. 226.
Xiphocercus Valenciennii, Cope, *l. c.* 1861, p. 215.

Acantholis, Coct.

Acantholis Loysiana, Coct. *l. c.* p. 141; Dum. & Bibr. *l. c.* p. 100; Bocourt, *l. c.* p. 69, pl. xiv. fig. 9.

? *A. argillaceus*, Cope, *l. c.* 1862, p. 176.

One specimen from Cuba, presented by Dr. Peters.

Norops, Wagl.

Norops auratus, Wagl. Syst. p. 149; Wiegm. *l. c.* p. 16; Dum. & Bibr. *l. c.* p. 82, pl. 37; Bocourt, *l. c.* p. 108, pl. xiii. figs. 5, 5*a*, pl. xvi. fig. 33, *a*, *b*.

A. perissurus, Cope.

There are now five adult specimens in the collection, one of which is the "type of *A. perissurus*, Cope."

N. tropidonotus, Peters, Berl. Monatsb. 1863, p. 135; Bocourt, *l. c.* p. 103, pl. xiii. fig. 6, pl. xvi. fig. 30.

A large series of examples is now added to the collection.

Having found that the specimen referred in Dr. Gray's catalogue to *Draconura chrysolepis* is really *Norops auratus*, I am now enabled to recognize this well-marked species, the examples of which I had supposed to be *N. auratus*. (See 'Annals,' 1869, iii. p. 183 &c.)

Draconura, Wagl.

Draconura nitens, Wagl. *l. c.*; Peters, *l. c.* 1863, p. 142.

A. refulgens, Schleg.; Dum. & Bibr. *l. c.* p. 91.

Three adult specimens from Pebas, collected by Mr. Bates.

D. catenata, Gosse, Ann. & Mag. Nat. Hist. 1850, ii. p. 344.

The type from Jamaica.

D. chrysolepis, Dum. & Bibr. *l. c.* p. 94; Guichen. Casteln. Amér. ii. p. 15, pl. iv. fig. 1; Bocourt, *l. c.* p. 99, pl. xvi. fig. 26.

A. scypheus, Cope, *l. c.* 1864, p. 172.

The specimen referred in Dr. Gray's Catalogue to this species is a *Norops auratus*. There are now two adults from Caracas and the Amazons, one of which is the type of Mr. Cope's *A. scypheus*.

D. capito, Peters, Berl. Monatsb. 1863, p. 142; Bocourt, *l. c.* p. 101, pl. xvi. fig. 27.

A. carneus, Cope, *l. c.* 1864, p. 171.

Two fine specimens (male and female) from Vera Paz, collected by Mr. Salvin; the types of Mr. Cope's *A. carneus*.

Anolis nummifer, sp. n.

Head a little shorter than tibia, its breadth two thirds of its length. Hind limbs long, reaching beyond the tip of the snout. Ear-opening not half the longitudinal diameter of the eye. Lateral canthus of muzzle sharp. Scales of muzzle roundish or polygonal, irregularly ridged, sometimes tricarinate; supraorbital ridges separated by two rows on the vertex, widely divergent anteriorly. Supraocular disk composed of about fifteen polygonal keeled scales, bounded externally by granules. Occipital large, elongate, with the angles rounded, half the length of the eye, with central tubercle. Scales of body very convex, granular, becoming modified into keeled scales on the central regions of the back, but scarcely increasing in size. Scales of lower surface larger, regularly arranged, rounded and keeled; of limbs keeled externally, granular internally. Tail not broadened at the base, round; scales small, keeled. Goitre very slightly developed. Digital expansions well developed.

Colours: above bronzed brown; a brown stripe across the orbital region. Sides with large round dark spots, extending in the form of dots on the lower surface of body and limbs; the latter viridescent. *Female* with bright longitudinal dorsal stripe.

Several specimens in the collection of the British Museum, from the Demerara Falls.

Anolis turmalis, sp. n.

Head a little shorter than tibia, shaped as in the last.

Scales of muzzle either convex only or indistinctly keeled. Supraorbitals separated on vertex by two rows of scales. Occipital large, ovate, larger than the ear-opening, and half the length of the eye. Polygonal scales of supraocular disk numerous, convex or weakly keeled. Infraorbitals two rows. Form elongate, slender. Hind limb reaching to or beyond extremity of muzzle. Several series of regular keeled scales on middle of back, larger than the granules which cover the sides, but smaller than the ventral scales, which are ovate and keeled. Tail long, rounded, covered with scales like those of the belly. Digital expansions well developed.

Colours: bronzed brown above; an orbital transverse stripe; lower surface viridescent; darker variegations on the back, taking the form of oblique streaks on the sides, as in *Draconura chrysolepis*.

Specimens in the British Museum from the island of Grenada.

Anolis tessellatus, sp. n.

Resembles *A. transversalis*. Head not quite twice as long as broad, no frontal concavity; covered with large polygonal flat scales; the supraorbitals in contact; the occipital large, but separated from these by several scales; the occipital region bounded triangularly by feebly raised ridges. Ear-opening small, round. Scales of back and sides polygonal or roundish, smooth; of belly larger, oval, imbricated, and keeled; those of the tail similar.

Digital dilatations narrow.

Colour: green, with brown markings on back and tail.

Specimen in the British Museum, collected by Mr. Salvin in Costa Rica.

Anolis lentiginosus, sp. n.

Head short, broad, obtuse, much shorter than tibia, its width being two thirds of its length; its height at the orbital region nearly equal to its width. Scales of the front and muzzle small, strongly tricarinate; of occipital region very numerous, polygonal, flat, the occipital itself being scarcely distinguishable in their midst. Supraorbital borders composed of numerous small-sized scales, separated by one or more scales on the vertex, and elsewhere rapidly and widely divergent. Nearly the whole of the supraocular space covered by about twenty rather small keeled or rugose scales. Scales of middle dorsal region larger than those of the sides, and increasing in size gradually from the neck to the tail; they are striate, presenting where the epidermis is preserved the appearance of being tricarinate; continuing on the tail they become distinctly

keeled scales. Scales of the sides granular; of the belly larger than those of the back, ovate, strongly keeled. Hind limbs long, reaching considerably beyond the end of the muzzle. Digital expansions moderate. Ear-opening small, round. Tail broad at the base, somewhat compressed, rounded above. Goitre very small.

Colour golden brown, freckled above with dark brown; a dark patch on the muzzle and a transverse orbital stripe; two brown lines across the back before the root of the tail, and some oblique ones on the tibiæ.

One specimen in the British Museum from Surinam, collected by Mr. Kappler.

Anolis gemmosus, sp. n.

Elongate, slender. Head narrow, of about the same length as the tibia. Hind limb reaching to end of snout. Tail very long and tapering, three times the length of the head and body. Upper surface of the head entirely covered by polygonal rugose scales, very numerous and closely set, small on the muzzle and prefrontal regions, where they converge to the central concavity, which is feebly and gradually formed; larger, but of similar character, on the vertical and occipital portions, there being no conspicuous ridges on any part of the head; occipital scale as small as the others. Ear-opening small, vertical. Upper surface of body, including the sides, uniformly covered by minute convex granules; ventral surface with equally uniform minute polygonal or rounded flat scales: the tail with minute keeled scales. Toes and claws slender, the expansions well developed.

Colours prettily variegated. Ground-colour above apparently a lustrous brown, with blue and violet reflections; a series of glittering spots like arrow-heads pointing forwards along median line of back, and numerous ring-like ocelli on the sides, the sides of the belly and lower surface of the limbs being regularly ocellated, and the chin variegated; upper surface of limbs banded and spotted.

This species presents a resemblance to the *Draconura nitens*, which differs from it in the size and proportions of the head, and in the strongly keeled scales of the muzzle, size of the occipital, and other points.

One specimen in the British Museum, the habitat of which is not indicated.

Norops onca, sp. n.

Head somewhat longer than tibia. Scales of muzzle convex and multicarinate, numerous; those of the supraorbital series

not much larger nor greatly raised, separated by several rows of convex scales; the occipital distinct, and larger than the surrounding scales, but small, elongate; a slight pit or depression on the region behind it. Two or three series of larger keeled scales on the superciliary space. Ear small, narrow, not much larger than the occipital.

Scales of the back small, keeled; of the side elongate, oval, convex; of the belly larger than those of the back, keeled; of the tail like those of the back and belly; of the limbs also keeled. The hind limb reaches to the eye; the fore limb the length of the side. The toes are not dilated. Goitre very large, extending nearly to the middle of the abdomen.

Colour pale brown, variegated with darker, in the form of large rhombic spots, open in the middle, along each side of the median line of the back; dark spots and streaks also on the sides, head, and limbs.

Specimens in the British Museum from Venezuela and Dominica.

XXXVII.—*Biographical Notice of the late* Dr. John Edward Gray.

It is our painful duty this month to record the death on the 7th ultimo of Dr. John Edward Gray, F.R.S. &c., who has been for the last seventeen years one of the Editors of this Journal.

Dr. Gray was born at Walsall in the year 1800; so that at the time of his death he had just completed his 75th year. He was the son of Mr. S. F. Gray, the author of the well-known 'Supplement to the Pharmacopœia,' and the grandson of Mr. Samuel Gray, a seedsman in Pall Mall, who possessed considerable scientific knowledge, translated the 'Philosophia Botanica' of Linnæus for his friend Mr. Lee, of Hammersmith, and assisted him in the composition of his 'Introduction to Botany,' which first made known the labours of the great Swedish naturalist to English readers. Dr. Gray may thus be regarded as belonging to a family in which natural-history tastes were hereditary.

According to his own account he was a weakly and ailing child, confined to his chair for eight months in the year, and never eating animal food. At a very early age he says he began the world, to provide for himself and help his family. He was originally intended for the profession of medicine; but his studies were very early turned specially to natural history;